



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,651	03/25/2004	Satoshi Natsume	1232-5356	6111
27123	7590	03/13/2009	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			WANG, KENT F	
			ART UNIT	PAPER NUMBER
			2622	
			NOTIFICATION DATE	DELIVERY MODE
			03/13/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
Shopkins@Morganfinnegan.com  
jmedina@Morganfinnegan.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,651	<b>Applicant(s)</b> NATSUME, SATOSHI	
	<b>Examiner</b> KENT WANG	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-3 and 5-10 are pending.

#### ***Response to Arguments***

2. Applicant's arguments, filed 02/17/2009, with respect to the rejection of claim 1 have been fully considered and are persuasive. Therefore, the finality of that action is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the interpretation of the original cited references.

#### ***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-3 and 5-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hirasawa (US 5,436,684).

Regarding claim 1, Hirasawa discloses a drive controlling apparatus (inner focusing type lens system, Fig 1) for controlling a drive of a plurality of optical adjusting members (the lens group to variably change a magnification 102 and the lens group having a function to correct the movement of a focal plane in association with the variable magnification and a focus adjusting function 105, Fig 5) included in an optical system of an optical apparatus (a video camera), comprising:

Art Unit: 2622

- a memory (a microcomputer 119, Fig 5) configured to store preset drive information (speed information) of each of the optical adjusting members (102 and 105) which include at least one preset speed and at least one preset position (the speed information of each zoom zone in Fig 3 has been stored as a table in the microcomputer 119, as the positions of the focus lens and zoom lens are detected by the encoders 115 and 113 and a driving speed of the focus lens is determined with reference to the table on the basis of those position information) (6:20-29);
- a controller (a microcomputer 119, Fig 5) configured to control the drive of each of the optical adjusting members (102 and 105) on the basis of the preset drive information (preset position and preset speed of the focus lens and zoom lens), including a state in which the plurality of the optical adjusting members are simultaneously driven (a proper lens control can be performed while maintaining a miniaturization of the lens without enlarging an actuator of the lens) (4:58-68 and 6:41-68); and
- a selection member (a microcomputer 119, Fig 5) configured for a user to select a mode from a plurality of modes (zooming selections between the wide and the telephotograph modes are considered as camera modes, Figs 2-3), each mode having set conditions that correspond to the preset drive information (7:32-51),
- wherein the controller (119) sets a drive speeds for each optical adjusting member (102 and 105) in accordance with the set conditions for the selected mode (drivers 110 and 112, Fig 5) (5:63-6:19); and

Art Unit: 2622

- wherein one of the plurality of modes includes set conditions that set the drive speed of a first optical adjusting member (the lens group to variably change a magnification 102, Fig 5) of the plurality of optical adjusting members to a preset speed and set the drive speed of a second optical adjusting member (the lens group having a function to correct the movement of a focal plane in association with the variable magnification and a focus adjusting function 105, Fig 5) to a speed calculated from the drive speed of the first optical adjusting member (the control means for controlling the moving speed of the second lens group in accordance with the moving speed of the first lens group detected) such that the drive of the first and second optical adjusting members to the preset positions stored in the memory are substantially simultaneously completed (when the zoom speed is changed, the moving speed of the focus lens can be determined without interrupting the process when a series of control is executed) (9:3-27).

Regarding claim 2, Hirasawa discloses one of the plurality of modes includes set conditions (zooming selection between the wide and the telephotograph modes, Figs 2-3) that set the drive speed of each optical adjusting member (102 and 105, Fig 5) to a maximum speed at which the optical adjusting member can be driven (when the zoom magnification is raised while suppressing the size of lens barrel, the gradient on the telephoto side suddenly increases, therefore to trace it with a high fidelity, the maximum speed at which the actuator of the focus lens can drive and improved with an increase in zoom magnification) (5:63-6:19, 6:30-40 and 7:32-51).

Regarding claim 3, Hirasawa discloses one of the plurality of modes includes set conditions (drive control of the zooming lens group 102 and focusing lens group 105 for the zooming selection between the wide and the telephotograph modes, Figs 2-3) that set the drive speed of each optical adjusting member (102 and 105) to a preset speed stored in the memory (the speed information of each zoom zone in Fig 3 has been stored as a table in the microcomputer 119) (6:20-29).

Regarding claim 5, the limitations of claim 1 are taught above, Hirasawa discloses one of the plurality of modes includes set conditions that set a first drive speed (zoom speed setting) of the first optical adjusting member (zooming lens, 102, Fig 5) to a preset speed (speed information stored as a table in the microcomputer 119, Fig 5), the first drive speed (zoom speed setting) being a speed at which the drive of the first optical adjusting member (102) is most quickly completed when the first optical adjusting member (102) is driven to a preset position, and set the drive speed of the second optical adjusting member (105) such that the drive of the first and second of optical adjusting members to the preset positions stored in the memory (step S108, Fig 6) are substantially simultaneously completed (when the zoom speed is changed, the moving speed of the focus lens can be determined without interrupting the process when a series of control is executed) (7:1-19, 52-68, and 9:3-27).

Regarding claim 6, the limitations of claim 1 are taught above, Hirasawa discloses one of the plurality of modes includes set conditions that set a first drive speed (zoom speed setting) of the first optical adjusting member (zooming lens, 102, Fig 5) to a preset speed (speed information stored as a table in the microcomputer 119, Fig 5), the first drive speed being a speed at which the drive of the first optical adjusting member (102) is most slowly completed

Art Unit: 2622

when the first optical adjusting member (102) is driven to the preset position, and set the drive speed (focus lens speed adjustment) of the second optical adjusting member (focusing lens, 105, Fig 5) such that the drive of the first and second optical adjusting members up to preset positions stored in the memory (step S108, Fig 6) are substantially simultaneously completed (when the zoom speed is changed, the moving speed of the focus lens can be determined without interrupting the process when a series of control is executed) (7:1-19, 52-68, and 9:3-27).

Regarding claim 7, the limitations of claim 1 are taught above, Hirasawa discloses a characteristic setting member (microcomputer 119, Fig 5) for variably setting a drive characteristic of the optical adjusting member (102 and 105), including at least one of a start time and a completion time (102 the zooming lens group can variably change a magnification and 105 the focusing lens group having a function to correct the movement of a focal plane in association with the variable magnification and a focus adjusting function) (5:52-62, 8:19-25 and Fig 6).

Regarding claim 8, this claim recites same limitations as claim 1. Thus it is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 9, this claim differs from claim 1 only in that the claim 9 includes a camera attached with the optical apparatus. Hirasawa discloses an image-taking system (a photographing apparatus) comprising a camera (a video camera) attached with the optical apparatus (an inner focusing type lens system) (see 1:10-12 and 6:30-40). Thus claim 9 is analyzed and rejected as previously discussed with respect to claim 1 above.

Regarding claim 10, this claim recites same limitations as claim 9. Thus it is analyzed and rejected as previously discussed with respect to claim 9 above.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - Makino et al. (US 4,735,494) provide an improved zoom lens control system and an improved method for zooming control of a rear focusing type zoom lens which remains focused on the image of the object during the zooming action;
  - Tanaka (US 6,967,686) provides an image sensing method which allows object focus tracking during zooming regardless of the shutter speed wherein a zoom motor for driving a zoom lens is controlled by a lens control microcomputer to decrease the zoom speed; and
  - Kubo et al. (US 6,822,686) provide a lens control apparatus in which, even if the mode of the sensitivity of a focusing-lens control voltage relative to the rotational angle of a rotary handle is changed over, the focusing-lens control voltage is not varied and, hence, the position of a focusing lens is not shifted.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent Wang whose telephone number is 571-270-1703. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-270-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan V Ho/  
Primary Examiner, Art Unit 2622

KW  
09 March, 2009